

WHAT IS CLAIMED IS:

1. A relay device, comprising:

connection detection means for detecting that a client terminal which can transmit/receive information through a network is in a communicable state with the network.

5 2. The relay device according to claim 1,

wherein the connection detection means acquires transmission-related information required to transmit information to the client terminal, and

10 the relay device further comprising notification transmission means for transmitting results from the connection detection means and the acquired transmission-related information to an information transmission device for transmitting undelivered information to the client terminal.

15 3. The relay device according to claim 1, further comprising:

information transmission means for transmitting the undelivered information to the client terminal, provided that the connection detection means detects the client terminal is in a communicable state with the network.

20 4. The relay device according to claim 3,

wherein the information transmission means selects undelivered information to be transmitted to the client terminal from information stored in transmission information storage means, provided that the connection

detection means detects the client terminal is in a communicable state with the network, and transmits the selected undelivered information to the client terminal.

5 5. The relay device according to claim 4,
 wherein the information transmission means transmits the selected undelivered information to the client terminal together with other information transmitted to the client terminal.

10 6. The relay device according to claim 5,
 wherein the other information transmitted to the client terminal is information transmitted/received by use of HTTP; and

15 the information transmission means adds the selected undelivered information by changing the HTTP header of the other information transmitted to the client terminal, and transmits the selected undelivered information to the client terminal.

20 7. The relay device according to claim 4,
 wherein the information transmission means transmits the selected undelivered information to the client terminal separately from the other information transmitted to the client terminal.

25 8. An information transmission device, comprising:
 notification reception means for receiving notification concerning detection of a client terminal which can transmit/receive information through a network is in

a communicable state with the network; and
information transmission means for transmitting
undelivered information to the client terminal, provided
that the notification reception means receives the
5 notification.

9. The information transmission device according to
claim 8,

wherein the information transmission means selects
undelivered information to be transmitted to the client
10 terminal from information stored in transmission
information storage means, provided that the connection
detection means detects the client terminal is in a
communicable state with the network, and transmits the
selected undelivered information to the client terminal.

15 10. The information transmission device according to
claim 8,

wherein the notification reception means receives
transmission-related information required to transmit
information to the client terminal; and

20 the information transmission means transmits the
undelivered information to the client terminal, provided
that the notification reception means receives the
transmission-related information.

11. An information transmission method comprising:
25 a connection detection step of detecting, by use of
connection detection means, a client terminal which can

transmit/receive information through a network is in a communicable state with the network; and

an information transmission step of transmitting, by use of information transmission means, undelivered information to the client terminal, provided that the connection detection means detects the client terminal is in a communicable state with the network.

12. The information transmission method according to claim 11,

wherein, in the information transmission step, the information transmission means selects undelivered information to be transmitted to the client terminal from information stored in transmission information storage means, provided that the connection detection means detects the client terminal is in a communicable state with the network, and transmits the selected undelivered information to the client terminal.

13. The information transmission method according to claim 12,

wherein, in the information transmission step, the information transmission means transmits the selected undelivered information to the client terminal together with other information transmitted to the client terminal.

14. The information transmission method according to claim 13,

wherein, the other information transmitted to the

client terminal is information transmitted/received by use of HTTP, and

5 in the information transmission step, the information transmission means adds the selected undelivered information by changing the HTTP header of the other information transmitted to the client terminal, and transmits the selected undelivered information to the client terminal.

10 15. The information transmission method according to claim 12,

wherein, in the information transmission step, the information transmission means transmits the selected undelivered information to the client terminal separately from the other information transmitted to the client 15 terminal.

16. The information transmission method according to claim 11, further comprising:

20 an information acquiring step of acquiring, by use of the connection detection means, transmission-related information required to transmit information to the client terminal; and

25 an information output step of outputting, by use of the connection detection means, the acquired transmission-related information to the information transmission means.